

Amendment to the Specification

Please delete lines 25-26 on page 12 of the specification and replace it with the following:

~~Identificación del producto del gen nmb00928 como la lipoproteína 34 de Neisseria meningitidis~~

Identification of the NMB0928 protein as the lipoprotein-34 (NlpB) of Neisseria meningitidis

Please delete the paragraph on page 12, lines 14-18, and replace it with the following:

Identification of proteins based on the mass spectra was carried out with the MASCOT program (Perkins DN, *et al.* 1999. *Probability-based protein identification by searching sequence databases using mass spectrometry data.* Electrophoresis 20:3551-3567. ~~<http://www.matrixscience.com/>~~ <http://www.matrixscience.com/>). Search parameters included cysteine modifications as well as oxidations and deamidations.

Please delete the paragraph on page 14, lines 4-5, and replace it with the following:

For the prediction of signal peptide the SignalP World Wide Web server (~~<http://www.cbs.dtu.dk/services/SignalP-2.0>~~ <http://www.cbs.dtu.dk/services/SignalP-2.0>) was employed.

Please delete the paragraph on page 16, lines 19-34, and replace it with the following:

To analyze the conservation of the sequence of the gene codifying for the NMB0928 protein in the pathogenic species of the Neisseria genus a similarity search with the genomes of *Neisseria meningitidis* (serogroups A, B and C) and *Neisseria gonorrhoeae*, annotated in the NCBI data base, was done (~~[NC_003116.1](#), [NC_003112.1](#), [NC_003221](#), [NC_002946](#)~~

SANGER_135720|Contig1 NC_003116.1, NC_003112.1, NC_003221, NC_002946

SANGER_135720|Contig1) employing the BLAST program (Altschul SF, et al. 1990. *Basic local alignment search tool*. J Mol Biol 215:403-410. <http://www.ncbi.nlm.nih.gov/BLAST/> <http://www.ncbi.nlm.nih.gov/BLAST/>). Figure 8 shows the results of the sequence

comparison for those sequences that produce a significant alignment in each of the analyzed genomes. Those sequences have 98% identity in serogroups A and C, 99% identity in serogroup B and 96% identity with *Neisseria gonorrhoeae*, with the sequence obtained for the gene that codifies for the NMB0928 protein (Seq. ID. No. 3). In addition, the sequence of the referred gene was determined for 3 Cuban isolates (Seq. ID. No. 5-7), which belong to serogroup B (B:4:P1.19,15) and a sequence alignment was done by using the ClustalX program (<http://www.ebi.ac.uk/clustalw/> <http://www.ebi.ac.uk/clustalw/>). The results of the alignment show that there is a great conservation in the nucleotide sequence of the gene NMB0928 among the analyzed strains.